

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Docket No. DIVER1370-6	Serial No.: Unassigned 69/777566
	Applicant(s): Jay M. Short et al.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date: February 5, 2001	Group Art Unit: Unassigned

1652

U.S. PATENT DOCUMENTS


EXAM. INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
DR	AA	5,593,963	01/14/97	Van Ooijen et al.	574	12	

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION (YES/NO)
DR	AD	0 897 985 A2	24.02.99	EP			
DR	AC	WO 99/08539	25.02.99	PCT			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

DR	AD	Altschul et al., "Basic Local Alignment Search Tool," <i>J. Mol. Biol.</i> 215 :403-410 (1990)
DR	AE	Dassa et al., "The Complete Nucleotide Sequence of the <i>Escherichia coli</i> Gene <i>appA</i> Reveals Significant Homology between pH 2.5 Acid Phosphatase and Glucose-1-Phosphatase," <i>Journal of Bacteriology</i> 172 (9):5497-5500 (1990)
DR	AF	Pearson and Lipman, "Improved tools for biological sequence comparison," <i>Proc. Natl. Acad. Sci. USA</i> 85 :2442-2448 (1988)
DR	AG	Pen et al., "Phytase-containing Transgenic Seeds as a Novel Feed Additive for Improved Phosphorus Utilization," <i>Bio/Technology</i> 11 (7):811-814 (1993)
DR	AH	Rodriguez et al., "Cloning, Sequencing, and Expression of an <i>Escherichia coli</i> Acid Phosphatase/Phytase Gene (<i>appA2</i>) Isolated from Pig Colon," <i>Biochemical and Biophysical Research Communications</i> 257 :117-123 (1999)

EXAMINER 	DATE CONSIDERED 6/23/03
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Docket No. DIVER1370-6	Serial No.: Unassigned 09/777,586
	Applicant(s): Jay M. Short et al.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date: February 5, 2001	Group Art Unit: Unassigned /652

<i>JR</i>	AI	J. Rozas and R. Rozas, "DnaSP, DNA sequence polymorphism: an interactive program for estimating population genetics parameters from DNA sequence data," <i>CABIOS</i> 11(6) :621-625 (1995)
<i>JR</i>	AJ	Verwoerd et al., "Phytase-Enriched Transgenic Seeds as a Novel Feed Additive," <i>Med. Fac. Landbouww. Univ. Gent.</i> , 58(4A) :1719-1721 (1993)
<i>JR</i>	AK	G. von Heijne, "A new method for predicting signal sequence cleavage sites," <i>Nucleic Acids Research</i> 14(11) :4683-4690 (1986)

EXAMINER <i>[Signature]</i>	DATE CONSIDERED 6/23/03
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Substitute Form PTO-1449 Modified	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 09010-029008	Application No. 09/777,566
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR 1.102(b))		Applicant Jay M. Short et al.	
		Filing Date February 5, 2001	Group Art Unit 4761 1652

U.S. Patent Documents


Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
DL	AA	5,366,736	11/22/1994	Edwards, Jr.	424	442	
	AB	5,436,156	7/25/1995	Van Gorcom et al.	435	252.3	
	AC	5,593,963	1/14/1997	Van Ooijen et al.	574		
	AD	5,830,696	11/3/1998	Short	435	69.1	
	AE	5,939,303	8/17/1999	Cheng, et al.	435	196	
DL	AF	6,190,897 B1	2/20/2001	Kretz	435		
	AG						
	AH						
	AI						
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Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
DL	AN	WO 99/08539	2/25/1999	Europe				
DL	AO	EP 0 897 985 A2	2/24/1999	Europe				
DL	AP	0 282 042B1	6/8/1994	Europe			Abstract only	
	AQ							
	AR							

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
DL	AS	Stephen F. Altschul, Warren Gish, Webb Miller, Eugene W. Myers and David J. Lipman, "Basic Local Alignment Search Tool", 1990, Academic Press Limited, J. Mol. Bio. Vol. 215, pp. 403-410
DL	AT	Henrik Brinch-Pedersen, Annette Olesen, Soren K. Rasmussen & Preben B. Holm, "Generation of Transgenic Wheat (<i>Triticum aestivum</i> L.) for Constitutive Accumulation of an <i>Aspergillus</i> Phytase", 2000, Molecular Breeding, pp. 195-206

Examiner Signature 	Date Considered 6/23/03
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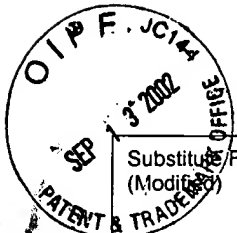
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 09010-029008	TECH. CENTER Application No. 1600/2300 09/777,566
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Jay M. Short et al.	
		Filing Date February 5, 2001	Group Art Unit 1761/652

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
DN	AU	Janie Dassa, Christian Marck, and Paul L. Boquet, "The Complete Nucleotide Sequence of the <i>Escherichia coli</i> Gene <i>appA</i> Reveals Significant Homology between pH 2.5 Acid Phosphatase and Glucose-1-Phosphatase", September, 1990, Journal of Bacteriology, Vol 172, No. 9, pp. 5497-5500
	AV	J. Dvorakova, "Phytase: Sources, Preparation and Exploitation", 1998, Folia Microbiol, Vol. 43(4), pp. 323-338
	AW	Lori Giver, Anne Gershenson, Per-Ola Freskgard, and Frances H. Arnold, "Directed Evolution of a Thermostable Esterase", October, 1998, National Academy of Sciences, Vol. 95, pp. 12809-12813
	AX	R. Greiner, U. Konietzny, and Kl.-D. Jany, "Purification and Characterization of Two Phytases from <i>Escherichia coli</i> ", May 15, 1993, Archives of Biochemistry and Biophysics, Vol. 303, No. 1, pp. 107-113
	AY	M. Lehmann, L. Pasamontes, s. F. Lassen, M. Wyss, "The Consensus Concept for Thermostability Engineering of Proteins", 2000, Biochimica et Biophysica Acta, Vol. 1543, pp. 408-415
	AZ	Lutz Jermutus, Michel Tessier, Luis Pasamontes, Adolphus P.G.M. van Loon, and Martin Lehmann, "Structure-based Chimeric Enzymes as an Alternative to Directed Enzyme Evolution: Phytase as a Test Case", 2001, Journal of Biotechnology Vol. 85, pp. 15-24
	AAA	William R. Pearson and David J. Lipman, "Improved Tools for Biological Sequence Comparison", April 1988, National Academy of Sciences, Vol. 85, pp. 2444-2448
	ABB	Jan Pen, Theo C. Verwoerd, Peter A. vanParidon, Rob F. Beudeker, Peter J.M. van den Elzen, Kees Geerse, Jan D. van der Klis, Hans A. J. Versteegh, Albert J.J. van Ooyen and Andre' Hoekema, "Phytase-containing Transgenic Seeds as a Novel Feed Additive for Improved Phosphorus Utilization", July, 1993, Bio/Technology Vol. 11, pp. 79-82
	ACC	Eric Rodriguez, Yanming Han, and Xin Gen Lei, "Cloning, Sequencing, and Expression of an <i>Escherichia coli</i> Acid Phosphatase/Phytase Gene (<i>appA2</i>) Isolated from Pig Colon", 1999, Biochemical and Biophysical Research Communications, Vol. 257, pp. 117-123
	ADD	J. Rozas and R. Rozas, "DnaSP, DNA Sequence Polymorphism: An Interactive Program for Estimating Population Genetics Parameters from DNA Sequence Data", 1995, Cabios, Vol. 11 No. 6, pp. 61-625
	AEE	Andrea Tomschy, Michel Tessier, Markus Wyss, Roland Brugger, Clemens Broger, Line Schnobelen, Adolphus P.G.M. van Loon, and Luis Pasamontes, "Optimization of the Catalytic Properties of <i>Aspergillus fumigatus</i> Phytase Based on the Three-dimensional Structure", 2000, Protein Science, pp. 1304-1311
	AFF	T. C. Verwoerd, A. Hoekema, P. A. van Paridon, A.J.J. van Ooyen , & J. Pen, "Phytase-enriched Transgenic Seeds as a Novel Feed Additive", 1993, Med. Fac. Landbouww. Univ. Gent. No. 58/4a, pp. 1719-1721
	AGG	Costantino Vetriani, Dennis L. Maeder, Nicola tolliday, Kitty S.-P. Yip, Timothy J. Stillman, K. Linda Britton, David W. Rice, Horst H. Klump, and Frank T. Robb, "Protein Thermostability Above 100°C: A Key Role for Ionic Interactions", October, 1998, National Academy of Sciences, Vol. 95, pp. 12300-12305
	AHH	Gunnar von Heijne, A New Method for Predicting Signal Sequence Cleavage Sites", 1986, Research Group for Theoretical Biophysics, pp. 4683-4690
DN	AII	Markus Wyss, Roland Brugger, Alexandra Kronenberger, Roland Remy, Rachel Fimbel, Gottfried Oesterhelt, Martin Lehmann, and Adolphus P.G.M. van Loon, February, 1999, Applied and Environmental Microbiology, Vol. 65, No. 2, pp. 367-373

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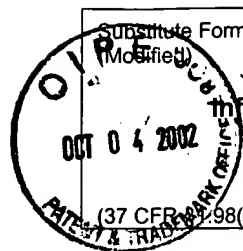
Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 09010-029008	Application No. 09/777,566
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Jay M. Short et al.	
		Filing Date February 5, 2001	Group Art Unit 176T/652

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PATENT 1601-600

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
On	AJJ	Database accession No. AR130956, February 2001
On	AKK	Database accession No. AAX26540, May 1999
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Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR 1.98(b))		Applicant Jay M. Short et al.	
		Filing Date February 5, 2001	Group Art Unit 1761

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U.S. Patent Documents

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
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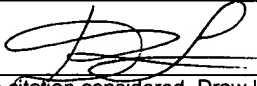
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Foreign Patent Documents or Published Foreign Patent Applications

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							Yes	No
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Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
DR	AQ	Database accession No. A02249, April 1996
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Substitute Form PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark OfficeAttorney's Docket No.
09010-029008Application No.
09/777,566**Information Disclosure Statement
by Applicant**

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Applicant
Jay M. Short et al.Filing Date
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TC 1700**U.S. Patent Documents**

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DR	AQ	Golovan et al., Characterization and overproduction of the <i>Escherichia coli appA</i> encoded bifunctional enzyme that exhibits both phytase and acid phosphatase activities", <u>Canadian Journal of Microbiology</u> , Vol. 46, No. 1, pp. 59-71, January, 2000
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U.S. Department of Commerce
Patent and Trademark Office

Attorney's Docket No.

09010-029008

Application No.

09/777,566

**Information Disclosure Statement
by Applicant**

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Applicant

Jay M. Short et al.

Filing Date

February 5, 2001

Group Art Unit

1761/652

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
DR	AA	5,284,933	Feb 8, 1994	Döbeli et al.	530	350	
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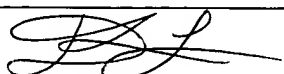
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